

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/05880

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04L25/03

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	YIN-TSUNG HWANG, JIH-CHENG HAN: "A novel FPGA design of a wireless block transmission channel equalizer" IEEE ASIA PACIFIC CONFERENCE ON ASICS, 28 - 30 August 2000, pages 119-122, XP002221821 Piscataway, US * equation 4 * page 120, right-hand column, paragraph 3 --- -/-	1-10



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

30 September 2003

Date of mailing of the international search report

07/10/2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X L	WO 01 39448 A (ERICSSON) 31 May 2001 (2001-05-31) raises doubts about the validity of the claimed priority  figure 5 page 13, line 14 - line 16 page 11, line 11 - line 21 page 17, line 3 - line 6 ---	1-10
X	LEI WEI, RASMUSSEN: "A near ideal noise whitening filter for an asynchronous time-varying CDMA system" IEEE TRANSACTIONS ON COMMUNICATIONS, vol. 44, no. 10, October 1996 (1996-10), pages 1355-1361, XP002221758 NEW YORK, US page 1356, right-hand column, paragraph 3 page 1358, left-hand column, paragraph 4 page 1359, left-hand column, paragraph 2 ---	1
L	LUPAS, VERD : "Near-far resistance of multiuser detectors in asynchronous channels" IEEE TRANSACTIONS ON COMMUNICATIONS, vol. 38, no. 4, April 1990 (1990-04), pages 496-508, XP002019257 NEW YORK, US completes disclosure of citation 3 ---	
L	ALEXANDER, RASMUSSEN: "An efficient technique for deriving receiver filters in multiuser asynchronous DS/SSMA" IEEE INTERNATIONAL SYMPOSIUM ON PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 18 - 23 September 1994, pages 519-523, XP000607885 Amsterdam, NL completes disclosure of citation 3 -----	

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0139448 A	31-05-2001	US 6590932 B1	08-07-2003
		AU 7733300 A	04-06-2001
		CN 1399835 T	26-02-2003
		EP 1232617 A1	21-08-2002
		JP 2003515972 T	07-05-2003
		WO 0139448 A1	31-05-2001

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